DEAR BASIL, 2/26/88

THANKS FOR YOUR LETTER AND WELCOME ABOARD! I LOOK FORWARD TO SYNCWARE NEWS UNDER THE "NEW MANAGEMENT".

BY ALL MEANS GO AHEAD AND PUBLISH THE TELESCOPE PROGRAM & ARTICLE, EVEN IF JUST EXCERPTS. ITS STILL A VALUABLE PROGRAM -- I ALWAYS WISHED IT HAD GOTTEN MORE USE. AS FOR TIMING, SURE WE MISSED HALLEY'S COMET, BUT THE TIMING MAY BE BETTER NOW THAN THEN. LET ME EXPLAIN: HALLEY WAS KIND OF A FIZZLE -- WE KNEW IT WOULD BE. IT WAS LOW IN THE SKY AND UP AT 4:00 AM! NOW THIS SUMMER AND FALL THE PLANET MARS WILL BE OVERHEAD SHINING BRILLIANT RED. IT WILL BE THE CLOSEST MARS HAS BEEN TO EARTH IN SEVENTEEN YEARS. EVEN A SMALL TELESCOPE WILL REVEAL ITS RED SURFACE AND WHITE POLAR ICE CAPS CLEARLY. WITH THE SHUTTLE FLYING AGAIN BY FALL AND WITH THE PRESIDENT'S AND NASA'S ANNOUNCEMENT OF A MANNED MISSION TO MARS (JUST ANNOUNCED LAST WEEK), IT MAY HAVE A BETTER CHANCE IN STIRRING INTEREST -- I KNOW P.B.S. PLANS SOME SPECIALS, TOO.

IF READERS WANT THE COMPLETE ARTICLE AND THE PROGRAM ON TAPE (TO SPARE TYPING) THEY CAN GET A COPY ON A NEW CASSETTE FOR $5.- (I'M ENCLOSING A COPY FOR YOU.)

THANKS!

Paul

P.S. - YOU ASKED ABOUT "A TAPE OF MY REVIEW OF ASTRONOMER PROGRAM". I DID A REVIEW OF A SPECTRUM PROGRAM CALLED ASTRONOMER. IS THAT WHAT YOU WERE REFERING TO? PB.

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SCOPE--2Ø68

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    1 REM 2Ø68 TELESCOPE SELECTOR
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   5 LET g=39Ø: LET A1=Ø: LET S1
=Ø
  1Ø PRINT AT 2Ø,Ø;"Name & Model
 of scope:": INPUT N$: CLS
  15 INPUT "size of aperture? ";
A: GO SUB 3ØØ
  2Ø IF A1=Ø THEN  LET A1=(INT (
1ØØ*(A/25.4)))/1ØØ
  25 INPUT "size of secondary mi
rror? ";S: GO SUB 3ØØ
  3Ø IF S1=Ø THEN  LET S1=(INT (
1ØØ*(S/25.4)))/1ØØ
  35 INPUT "focal ratio? ";R: LE
T F=INT (.5+(A*R)): IF R<>Ø THEN
  GO TO 5Ø
  4Ø INPUT "focal length OR tube
 length? ";F: GO SUB 3ØØ
  5Ø REM   light-grasp
  55 LET LG=INT ((A1*3.54)^2)
  6Ø LET L=INT ((((A/2)^2*PI)-((
S/2)^2*PI))/5Ø.264)
  7Ø REM   % obstruction
  8Ø LET P=(INT (1ØØØ*(S/A)))/1Ø
  9Ø REM     magnitude
 1ØØ LET min=(INT (1Ø*(8.8+5*LN
A1*.434)))/1Ø
 11Ø LET max=(INT (1Ø*(9.9+5*LN
A1*.434)))/1Ø
 12Ø REM  tube/focal len & f/no.
 13Ø LET T=(INT (1ØØ*((F/25.4)/1
2)))/1ØØ
 14Ø LET FN=(INT (.5+(1Ø*(F/A)))
)/1Ø
 15Ø REM  magnification
 16Ø LET PL=INT A1*55
 17Ø LET PM=INT A1*25
 18Ø LET PS=INT (.5+(A1*3.2))
 19Ø LET EL=INT (F/PL)
 2ØØ LET EM=INT (F/PM)
 21Ø LET ES=INT (F/PS)
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 22Ø REM   resolution
 225 LET DL=(INT (1ØØØ*4.56/(A/2
5.4)))/1ØØØ
 23Ø LET RE=(INT (1ØØØ*(((178/FN
)-(FN/1Ø+4))*FN)/A))/1ØØØ
 235 FOR i=Ø TO 31: PRINT AT Ø,i
;CHR$ 34;AT 19,i;CHR$ 34: NEXT i
 24Ø PRINT AT 1,Ø;"APERTURE: ";A
1;" inches";TAB 24;A;"mm": PRINT
 "Secondary: ";S1;" inches";TAB
24;S;"mm"
 245 PRINT "Light-grasp: ";LG;"
X eye": PRINT "Obstruction: ";P;
"%"
 25Ø PRINT "Free Objective Area=
 ";L;" X eye"
 255 PRINT "Magnitude Range:";TA
B 19;"min ";min: PRINT TAB 19;"m
ax ";max
 26Ø PRINT "Unfolded Tube Length
: ";T;" ft ": PRINT "Focal lengt
h: ";F;"mm": PRINT "Focal Ratio:
 f/";FN
 265 PRINT "Magnification Limits
:": PRINT TAB 2;"Max: ";PL;"X";T
AB 15;"eyepiece: ";EL;"mm"
 27Ø PRINT TAB 2;"Avg: ";PM;"X";
TAB 15;"eyepiece: ";EM;"mm"
 275 PRINT TAB 2;"Min: ";PS;"X";
TAB 15;"eyepiece: ";ES;"mm"
 28Ø PRINT "Dawes' Limit: ";DL;"
 Arc sec": PRINT "Resolution Pro
b: ";RE;" Arc sec"
 285 PRINT AT 18,Ø;"For: ";N$
 29Ø INPUT "Copy? Y/N ";A$: IF a
$<>"n" THEN  COPY
 294 STOP
 295 SAVE "scope" LINE 1: SAVE "
scope" LINE 1: STOP
 3ØØ LET g=g+1Ø: INPUT "was last
 value in inches? ";A$: IF A$<>"
n" THEN  GO TO g
 31Ø RETURN
 4ØØ LET A1=A: LET A=INT (.5+(A*
25.4)): RETURN
 41Ø LET S1=S: LET S=INT (.5+(S*
25.4)): RETURN
 42Ø LET F=INT (.5+(F*25.4)): RE
TURN
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